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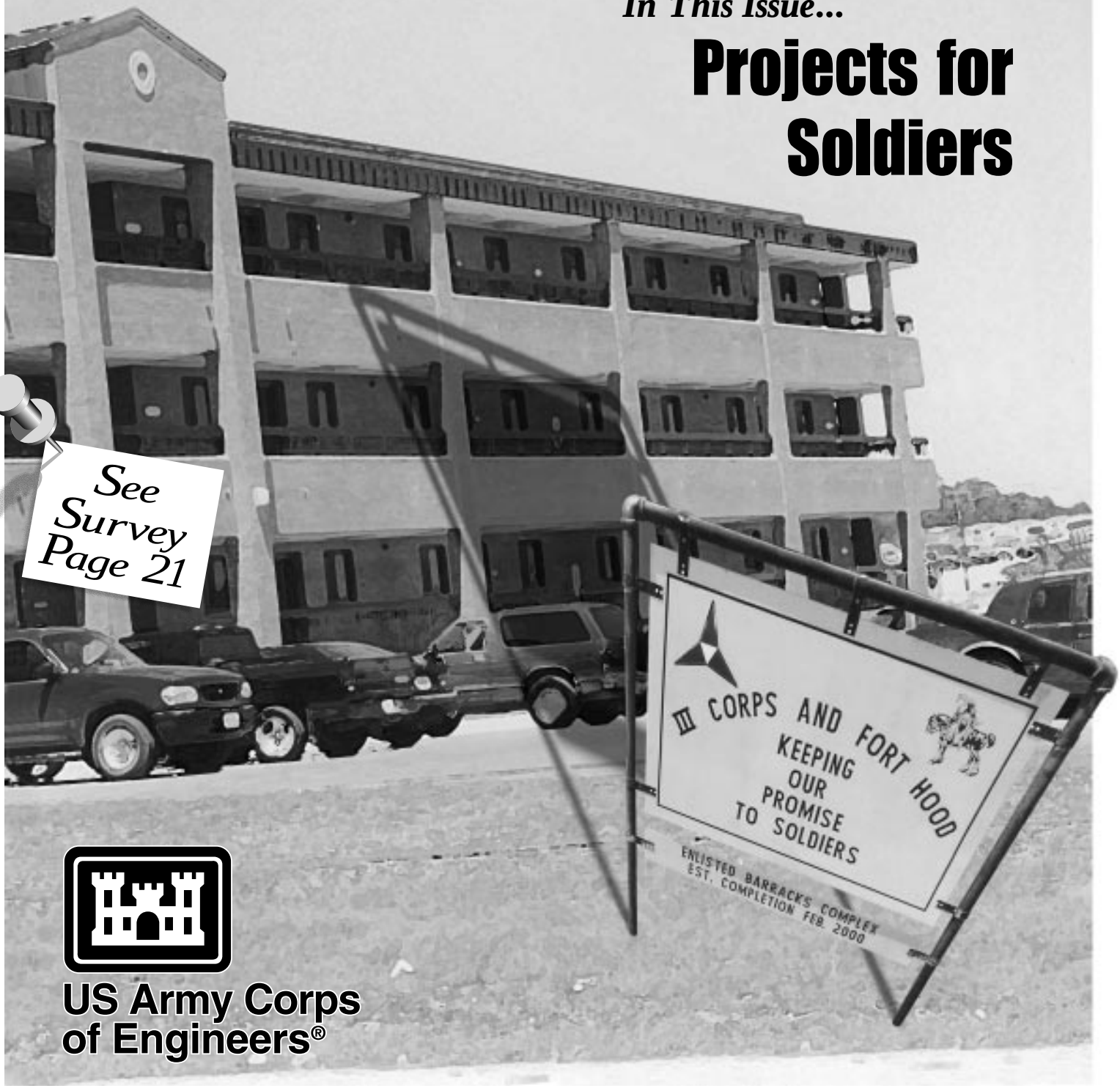

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Allaman views reengineering as opportunity

by Penelope Schmitt

In a recent Town Hall meeting with her Center for Public Works staff, Kristine Allaman, new Director of CPW and the soon-to-be-established headquarters Installation Support Division, viewed changes in Military Programs as an opportunity to improve support to the Army.

"I have a lot of history with installations," Allaman said. "I spent a major part of my career working as a Director of Engineering and Housing or DEH staff member in Europe. And I served as part of the CPW Engineering Directorate. So I know the Army issues well. In recent years, I've had a chance to become well acquainted with other Corps operations, in Walla Walla District and at Northwest Division in Omaha. I see a lot of ways that the capabilities of both sides of the Corps can be brought together to improve service to the Army."

Allaman took care to dispel any rumors that she might have been called to headquarters to oversee the demise of installation support as it has been practiced at the Center for Public Works. "I see the next year as a critical time for sustaining and enhancing the Corps' ability to support the Army. We have a great opportunity here," she told her staff, "to get out into the Corps with the customer service attitude that has always made this organization so valuable. We need to discover and help installations take advantage of all the superb capabilities that exist for them in the field."

"That is the way I view the **Military Programs Reengineering Effort**—and the way I want you to see it, understand it, work it, and live it!"

"The things CPW has done for the Army are valuable! Essential! The Corps will keep those services and build on them. I am proud to be carrying on a mission that has such a distinguished history. I've reviewed CPW's annual reports for the past three years. The scope and quality of work this organization has done for the Army is impressive.

- The hotline desks have taken thousands of calls to solve problems for people running Army automated Real Property Management systems.
- The Army Power Procurement Directorate saved millions for the Army through rate negotiations and contracting efforts.
- The Prime Power Loan Program has helped several installations cut energy costs by $500,000 or more a year.

"Those are just a few of the things that caught my eye!

"Proud as I am of where this organization has been, I also know we can't hang on to the past. For a long time, CPW saw itself as the one place in the Army where installations could go for good service and honest answers. I remember very well how we played that role when I was part of the Engineering Directorate in EHSC days. Now, the Corps is going to send CPW people out into the field—and while they can keep on being that 'one place' for customers, it's going to be a much larger place—the whole U.S. Army Corps of Engineers."

"You know the old saying that it's better to light one candle than to curse the darkness? This is not about CPW thinking that it is the only candle! It's about creating a whole lit-up birthday cake that casts light across the Corps map, the Army map. It's about creating points of access for the excellence that's already out there in great abundance. As part of the Installation Support Division at Headquarters, Huntsville Center, and Public Works Service Centers, we will open avenues for installations to get not only the services CPW offered, but also the whole range of other Corps services that are available to support our Army."

Chief's Vision

"In taking on this challenge, we are working out the Chief of Engineers' Vision in a number of important ways:

Revolutionize Effectiveness: By building an integrated Corps network for installation support, we are changing a stepchild, satellite mission into a main line mission of the whole Corps. **We are aligning for success!** By elevating the mission at HQ and getting mission execution embedded throughout the Corps, we are going to be able to improve responsiveness and services. We will be better able to **satisfy customers**. Through the Public Works Service Centers (PWSCs), we'll be able to further enhance the effective partnership among the DPWs, Area and Resident Engineers, Districts and Corps Forward staff members. **We are building the team.**

Seek Growth Opportunities: Yes. In a world of downsizing we can still talk about growth, when we realize that we can give customers better access to all that the Corps offers. I'm excited at the prospect of linking installations to all the valuable expertise in the Corps—whether it's at a PWSC, Business Center, District or lab. The more we **serve the Army,** the more we **enhance our capabilities** to serve.

Invest in people: My colleagues in Military Programs and I truly see our reengineering effort as a prime time to invest in people. It is **strategic commitment** for leadership to see that we make the most of our staff's talents for the good of the Army and the Corps. I know what the Corps—and CPW in particular—has to offer our Army customers:

- A history of high quality work.
- A wealth of talent.
- A commitment to see and serve the installation customers' point of view.

Those are three invaluable tools that will help us **reshape the Corps culture.** PWD

Penelope Schmitt is the chief of CPW's DPW Liaison Office.

Unconstrained requirements programming works best with unconstrained design

by Douglas W. Robb

Northeast elevation of Mahan Hall with the east wall of the Cullum Bridge to the right.

Until recently, design scopes at the United States Military Academy (USMA) were driven by the dollars that the project manager was told were available for the project. Consequently, once the design scopes were established, no one was willing to consider making major changes. This practice resulted in low volatility in West Point's project programs and some poor designs and projects.

What changed this practice forever at West Point?: a project to repair and replace the HVAC system in the 10-story, 192,601-square-foot Mahan Hall building.

Mahan Hall is the home of the Systems Engineering and Civil & Mechanical Engineering Departments of the USMA at West Point. Floors one to four of Mahan Hall are comprised mainly of classrooms and administrative space. Floors A to F are comprised mainly of industrial laboratory space, including internal combustion engine test cells, steam, hydrology, concrete and wind tunnel labs, and the main boiler/mechanical room.

As originally conceived in 1990, Mahan Hall's renovation consisted only of complete repainting and repapering. The cost estimate was $350,000. In 1993 during an extended period of extremely cold weather, univent heaters on the river side of the building froze and burst five times, causing extensive water damage. As a result, the project scope was modified to include replacement of the univent heaters. The new project estimate was $3.5 million. It was approved for design and programmed for fiscal year 1997.

A new project manager, who had been at West Point less than six months, was given this HVAC and painting project. He had never been briefed that programmed amounts and design scopes were sacrosanct. His first act was to ask the Engineer Resource and Management Division (ERMD) for all the outstanding work orders for Mahan Hall. Next he set up a meeting with ERMD personnel and the building commandant to determine which work orders were still valid, which were in the process of being accomplished by other means, and which should be added to the project scope.

No one was prepared for the number of items recommended for inclusion in the project:

- Removing and replacing asbestos-containing floor tile.
- Replacing suspended hallway ceilings during HVAC replacement.
- Upgrading existing sprinkler and fire alarm systems to current standards and expanding to all non-sprinklered areas.
- Upgrading existing communication systems.
- Correcting existing fire/life safety violations in laboratories.
- Adding bathrooms for women on floors A to D.

All of the utility systems were failing. There were missing waterline shutoff valves on each floor and multiple deficiencies in the electrical and lighting systems in Arnold Auditorium. Spot repairs were required to the building exterior, including cleaning of stonework, repointing of mortar joints, repairing exterior stairs and lighting, and sealing of spot leaks in the building facade. Work orders were written to cover all new items, and a new cost estimate was made.

When the list of required work was completed, the programmed amount had nearly tripled!

At this point, there was great confusion. No one was sure how to proceed. The personnel from the Utilities and Facilities Division of the Directorate of Housing and Public Works (DHPW) felt betrayed. They had worked long and hard to justify and program the project to fix the HVAC. Now others

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were proposing to use "their" $3.5 million to fix things besides the failing HVAC system! The building occupants were adamant that they would not suffer the noise, dust, and dislocation the HVAC project would inflict on them if that was all that was going to be fixed in the building. The DHPW fire inspectors said that any major renovation project in the building had to correct the identified life safety and fire deficiencies.

Who should resolve the scope questions? How many Mahan Hall projects should be programmed and for what fiscal years? Were the cost estimates accurate enough to make good decisions? How much involvement in the decisions should the building occupants have? Would the work be done in a vacant or occupied building?

It became apparent that the only thing everyone agreed on was that there was insufficient data to make an informed recommendation to the USMA leadership on how to proceed.

At this point, the informal Mahan Hall design group was formed into a process action team (PAT) under the direction of Associate Dean of Operations Registrar, Dr. William Penny.

The Mahan Hall PAT formally requested the DHPW to fund the New York District, Corps of Engineers (NYD CoE) to design everything in the scope, and to defer all decisions on what to include in the contract until receipt of the 35 percent design plans and cost estimate. At that time, the A-E would be told what to include in the several design packages that would be funded and contracted over several fiscal years. This approach was approved, and the NYD CoE negotiated with the selected A-E firm for the design of an estimated $8.5 million total building renovation project for Mahan Hall.

Everyone involved was highly optimistic. They believed that the project was back under control and would be accomplished as originally planned—an HVAC project, with the addition of some critical life and fire safety issues. The remaining scope issues would be designed, prioritized and accomplished over the following two or three years by several small contracts configured to accommodate both the building occupants and DHPW's future project budget. This would result in everyone's most critical scope needs being completed, and there wouldn't be any major disruption to the DHPW's future project program.

The result turned out even better than that. After receipt of the 35 percent design and cost estimate, the USMA leadership embraced Mahan Hall as being its number one OMA requirement and tasked the budgeteers to find a way to fund the full scope project which was estimated at over $12 million at that time.

While in the end, everyone's expectations had been exceeded, we learned two very important lessons from the Mahan Hall project:

1 Major renovation projects should be designed as a single entity, regardless of funding constraints, provided you maintain flexibility to break the scope into several projects which can be executed individually.

2 Involve the users/occupants/maintenance personnel early in the design phase. In the case of Mahan Hall, there was a formal Process Action Team (PAT) formed by the Dean of the Academic Board and including members from the Office of the Dean of the Academic Board, DHPW, DOIM, and PMO. The PAT met at least quarterly

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Please! No horse trading allowed!

by Mike Organek

In government contracts, we have a scope of work, which defines the requirement to be performed by the contractor, and a corresponding bid schedule, which lists the specific contract line item numbers with a price associated with each item. Any change to the contract bid schedule, scope of work or anything else needs a written contract modification signed by a contracting officer. Keep in mind that oral commitments are not legally binding in the realm of Government Contracting.

Often, situations arise during contract administration (the performance of the contract) which deviate from the scope of the contract. So instead of requesting the contracting officer to issue a contract modification, it's *easier* and *faster* to accomplish the change with *a little ole fashioned horse trading:* "I'll allow this (on behalf of the government) if you (the contractor) will do that," or quid-pro-quo.

What's wrong with that? **Everything!**

Pardon the repetition, but any change to the contract bid schedule, scope of work, or anything else needs a written contract modification signed by a contracting officer.

The DPW is mission oriented and wants to get the project completed as soon as possible to satisfy the customer. But the dilemma lies in the fact that the integrity of the federal acquisition process cannot be compromised or circumvented for expediency.

If horse trading or quid-pro-quo contracting does occur, the built-in checks and balances of the payment process take effect. If an item which is not in the contract appears in the contractor's invoice, how can the government's contractor inspector allow payment if all items *must be matched with an actual contract line item number?* Does the government contract inspector then risk committing fraud by doing some more horse trading in falsely matching the unaccountable/unallowable item to an existing contract line item number?

Remember the cliche, "Oh what a tangled web we weave, when first we practice to deceive." The situation just compounds itself when improper contracting takes places, no matter how well intended the action. Remember, *only the contracting officer can make authorized changes to the contract.*

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Mike Organek works on contracting issues in CPW's Engineering Directorate.

to resolve questions and provide direction. Critical in developing support for funding the project and developing a funding/execution strategy, the PAT members are continuing to serve during the construction phases of the project.

With the project well into the design phase and the USMA leadership in support of funding the full scope, the PAT members declared victory and prepared to bring the troops home by Christmas. However, the battle was far from over. There were several surprises and challenges remaining, including:

- Finding a way to contract the project so that one contractor could be retained for the entire contract even though the OMA funds were programmed in five successive fiscal years.
- Discovering the building has severe wind and seismic problems that would take a year and a half of design effort and increase the cost estimate by another third.
- Removing and replacing the entire HVAC system in this 10-story, 192,601-square-foot building) without interrupting the academic schedule of the Civil and Mechanical Engineering, and System Engineering Departments.

Each of these challenges is a story all by itself. To be continued...

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Douglas W. Robb was the chief of the Engineering Plans and Services Division, USMA, until his retirement last month.

Military Academy looks to DASNY for help

The U. S. Military Academy at West Point is enlisting the aid of DASNY to help solve its extensive water infiltration problems.

What is DASNY?

DASNY is the Dormitory Authority of the State of New York. This organization performs over a $1.5 billion in design and construction services for the State of New York annually. DASNY finances and builds facilities for higher education, health care providers, and certain nonprofit institutions and public agencies by issuing tax-exempt securities, then lending the proceeds to clients to finance the construction, rehabilitation, or equipping of facilities needed to furnish services to New Yorkers. Former clients include such diverse organizations as the Metropolitan Museum of Art, Roswell Park Cancer Institute, the City and State Universities of New York, and New York City's Unified Court System. DASNY works for county and municipal governments as well.

Douglas Robb, Chief of Engineering, Plans and Services within the Directorate of Housing and Public Works at West Point, was tasked to explore the possibility of hiring DASNY. He asked Enricho Bianchi, DASNY's Director of Engineering Services, to look at the water infiltration problems in Washington, Mahan, and MacArthur Halls. Bianchi was confident that he could help, since he had dealt with similar problems at Columbia University and the City College of New York. But after discussing the matter with DASNY's legal staff, he said that their charter only allowed them to perform work for State and local agencies. In other words, it would require special enabling legislation to allow DASNY to perform engineering and design services for a Federal Agency.

Robb enlisted the aid of State Senator William Larkin and Assemblywoman Nancy Calhoun, and their offices assured him that they would sponsor such legislation if requested to do so in writing. With the help of Lori Doughty, a lawyer in the Administrative Law section of the Academy's Staff Judge Advocate, Robb established that there were no legal impediments to the Military Academy requesting the special legislation. Letters were then drafted for the Garrison Commander's signature.

Unfortunately, all the necessary coordination and requests for approval took time, and the signed request did not reach Senator Larkin and Assemblywoman Calhoun's office until the beginning of June. The State legislature was scheduled to adjourn on 19 June, and most people doubted that there would be sufficient time to prepare the necessary legislation and get it voted on before then.

It was touch and go for a while, but the legislation passed the State Senate on 18 June. However, several Assembly members still had questions on the contracting program for minority and disadvantaged contractors. With the assistance of Eleanor Lincoln, Directorate of Contracting, those questions were answered.

Several questions still remain unanswered before DASNY can actually begin work. How the process will work is yet to be determined. Representatives from DASNY and USMA will meet soon to work out a Memorandum of Understanding which will provide the guidelines on how the work will be performed, how DASNY will be contracted and paid, and what their authority and responsibilities will be. But one thing is sure, a new era has begun at West Point. With the addition of DASNY, the Academy will have a strong tool for solving its existing engineering problems and preventing future ones.

POCs are Enricho Bianchi, Director, Engineering Services, DASNY, (518) 257-3305, FAX: (518) 257-3100, and Michael Colacicco, Director, Housing and Public Works, USMA, (914) 938-3415.

DASNY website: www.dasny.org/dasny.htm PWD

End of Round 1 of the Facility Reduction Plan

by Greg Brewer

We are well into the 4th quarter of FY98. By now installations should have obligated most of their FY98 Facility Reduction Program funding. Contract work should be ongoing or contracts should be nearing completion at procurement, and in-house work should be ongoing or work orders written and scheduled for execution. September 30th is close at hand. Remember, contract work can carry into the next fiscal year, but the FY98 funding cannot.

This is also the time of year when the Facility Reduction Plan (FRP) managers and the Real Property Inventory (RPI) managers should be getting together to assure that the RPI reflects the proper disposition of all disposal properties.

The last facility reduction article, "It's Third Quarter FY98. How Goes the Disposal War?" was printed in the July-September issue of Installations. It gave a detailed explanation of what must appear in IFS for proper crediting of disposals.

If the facility to be demolished is to count as part of the Facility Reduction Program, then a "G", "H", "J", or "W" Planned Disposition Code must be entered on the RPF_USE SCREEN in IFS. "G" identifies a disposal as part of the Facilities Reduction Program. "H" identifies facilities in the footprint of MCA construction. "J" identifies one-for-one disposals. "W" identifies facilities that are layaway for disposal.

You have until 30 September to assure that the data is entered correctly in IFS. That is the cutoff for annual IFS updates to the installation real property inventory. Remember if not properly recorded in IFS, your installation does not get credit for its disposal.

All the MACOM five-year plans have been received and reviewed. The HQDA five-year plan is now being prepared and FY99 funding guidance should be issued in September. If funding holds, the Army should reach its disposal goal by the end of FY03.

During the development of Program Objective Memorandum 00-05, the FRP was cut to $50M per fiscal year. This was a conscious decision made by Army leadership because of other affordability issues. It appears that DoD will require that the funding be restored. The September FRP funding guidance will reflect the final funding position.

Though FY99 and FY00 are going to be lean years, it is important that the FRP stay on track to keep the excess facilities slated for disposal from remaining a drain on facilities resources. The temptation to divert funding to other installation requirements will be great. This may lead to the temptation to continue to retain and occupy excess facilities because the designated demolition funding is no longer available. In turn, the installation will divert funds to operate those excess facilities rather than spend the funds on required facilities.

There is constant debate about value added from the FRP, and can we afford it. We must. Reducing the installation "footprint" remains a cornerstone in ACSIM (Assistant Chief of Staff for Installation Management) strategic planning. We cannot afford to retain facilities we do not need. We are still accountable to the Secretary of Defense to dispose of 53 million excess square feet.

Execution of disposal, beginning in FY99, will become easy to track with the implementation of Programming Element '93. Let us keep the FRP on track and not divert funds from the program. The quality of the facilities on an installation depends on this, and the ultimate winner or loser will be the installation.

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Veterans rebuild lives through construction projects at Devens Reserve Forces Training Area

by Eric J. Hurwitz

The Veterans Construction Team (VCT) has not only saved buildings from falling apart, but also lives from doing the same.

Since its inception in 1993 at the Edith Nourse Rogers Memorial Veterans Hospital (Bedford VA) in Bedford, Massachusetts, the VCT has enjoyed success with sales growth from $80,000 in contracts at its beginning to $4 million in 1997. Highly skilled management and veteran trades persons and diverse on-site supervisors have offered customers professionalism and monetary savings while rehabilitating veterans in recovery.

The Devens Reserve Forces Training Area (Devens RFTA), Devens, Massachusetts, recently hired the VCT to refurbish a building which will be used for billeting and classroom activity. With over 60,000 soldiers training annually at the Devens RFTA, (formerly Fort Devens), this thriving installation will no doubt reap the benefits of its new building.

The veteran's job at the Devens RFTA includes, but is not limited to, working on vents, removing kitchen equipment, interior painting and installing energy-efficient lighting and state-of-the-art acoustical ceilings.

Veterans work with a sense of purpose on this project. The veterans know they have a prime opportunity to turn their lives around from any problems—primarily substance abuse—they've experienced in the past.

The VCT serves as a division of the Compensated Work Therapy Program (CWT) within the Department of Veterans Affairs. The organization serves men and women (approximately 50) in transitional employment opportunities and addresses the vocational needs of homeless veterans and those stigmatized by a past history of substance abuse, psychiatric disorders or an inability to adjust to civilian life.

Selection of veterans is based on referrals throughout the hospital. Prior to being assigned to the VCT, staff psychologists evaluate the veterans, who are also mandated to attend a safety education program. Throughout the program, the veterans continue to be assessed for progress in work, home, and family adjustment.

Bobby Griffis, of the Devens RFTA Engineering Team and a Vietnam veteran, views the VCT as a vital organization in the Army. "The VCT is not a welfare team," said Griffis. "It is a viable, realistic, hard-working organization. Every time I go over there (to building 637), they make me proud to be a veteran."

The VCT, with projects primarily in New England, has demonstrated tremendous work ethic, and, ultimately, results.

"The quality shown is equal to or better than contractors we've had here," said John Reis, chief of the Engineering Division at the Devens RFTA. "Here, we are not getting 'nickel and dimed' and dealing with contract modifications. They are not here to make a profit."

Reis estimates that the project would have cost over $300,000 if contracted. With the veterans, the completed work should cost approximately $200,000.

Successfully completing assignments, while overcoming personal problems, is a challenge, to say the least. Substance abuse, primarily alcohol, is the most common problem and had sent many of the men and women veterans in this program "to the bottom of the food chain," says Bernie Cournoyer, VCT program manager at the Bedford VA.

The VA assumes all liability for VCT work. However, with an extremely disciplined program, the VCT has successfully rehabilitated 80 percent of the veterans within the program, according to Cournoyer.

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LTC Edward R. Murdough,. commander of the Devens RFTA, recently briefed VCT managers, supervisors and construction workers on the installation's mission. (Photo by Jan Abate)

Contractors in the house

by Randy Klug and Jerry Zekert

As the Army moves to contracting out more and more of its support services, the question of the proper provision of space for contractor personnel is becoming an issue. This article attempts to briefly outline present Army policy and guidance concerning the assignment of space to contractors.

First, space or facilities may be assigned to a contractor when an installation commander determines, as required by FAR 45-302-1 and supplementing regulations, that it is in the best interest of the Army to do so. Prior to contract solicitation, the assignment of space or facilities to a contractor must be reviewed by the installation Director of Public Works (DPW) for space requirements validation, determination of availability of space or facilities, and coordination of the planned utilization. If the Army furnished space or provided facilities to a contractor, the contract must identify the space or facilities, type of space or facilities, and total gross and net square footage to be provided.

Second, contractors will be assigned space in accordance with approved Army Space Planning Criteria. For example, administrative space allocations in AR 405-70, Utilization of Real Property, will be used to determine office, storage and special space requirements. For allocation purposes, grade and position equivalencies will be used for contractor personnel. Contractor space requirements should not exceed Army space criteria for personnel accomplishing similar functions or missions at similar grades. Neither the Director of Public Works nor the Contracting Officer can approve assignment of space in excess of what is permitted by the appropriate Army directive.

One other item to consider. If the Army is providing space to contractor personnel, then the Army should realize some kind of savings by doing so. Most contractors include in their overhead costs a charge for providing space for their employees. Contracts should be closely reviewed to assure that the Army is not being charged for space that it is providing. This is an audit item for such activities as the Army Audit Agency (AAA) and General Accounting Office (GAO).

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Jerry Zekert is the chief of CPW's Planning and Real Property Division.

"The veterans come in here and learn that work is your identity. If you don't work, you are not accepted," said Cournoyer.

LTC Edward R. Murdough, commander of the Devens RFTA, is quite pleased with the program. He said, "The VCT is a great program. We owe it to our veterans to give them a hand. The fact that we need the work done just adds to the benefit. Every military installation should fight to have these guys working on the installation."

Apparently, others in the New England region feel the same way. Testimonials from Hanscom Air Force Base, Massachusetts, the U.S. Army Soldiers Systems Command, Massachusetts, the Department of Veterans Affairs Medical Center, New Hampshire, and the Lowell Vet Center paint the VCT as a highly effective organization.

And it has helped places like the Devens RFTA. In fact, the Devens RFTA has been so impressed by the VCT's work that two new projects are waiting on the team's doorstep.

Cournoyer is confident the program will expand to national status, based on the many inquiries he has received from other federal agencies in Washington, D.C. As the VCT continues to work at Devens, the players gain confidence, and the program grows.

For more information on the VCT, please call the Bedford VA VCT at (781)687-3153. PWD

NOTE: Government agencies can contract the VCT under Economy Act (31 U.S.C. 1535), under which an agency "may place orders with any other agency for supplies that the servicing agency may be in a position or equipped to supply, render, or obtain by contract if it is determined by the head of the requesting agency, or designee, that it is in the Government's interest to do so. (Section 17.502)."

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A Veterans Construction Team employee measures a piece of wood that will be used as part of a wall.

A boost for the Booth

by Vince Elias

In the shadows of the skyscrapers of New York City is the most famous recruiting station in the country, the U.S. Armed Forces Recruiting Station—Times Square. Located in the heart of the Big Apple, the Station will undergo a complete transformation that will modernize it for the next millennium.

The existing stainless steel and glass structure has been around since the 1950s, and it will be completely demolished and then rebuilt with many features, including an exterior high-tech design with an American Flag of neon lights and nine video display screens. The station will also be fitted with an access ramp for the physically-challenged in compliance with the Americans With Disabilities Act.

The existing station succeeded an earlier cottage-style structure (14 x 18 feet) on the same site, which was built for the Army in May 1946 under a temporary permit from the City of New York. That permit was superseded by a permanent one issued in 1950 by Robert Wagner, Jr., Manhattan Borough President, granting indefinite, no-cost use of the site for a single, four-service recruiting station. The station replaced the "cottage" with the existing 360 square foot steel and glass structure, constructed and subsequently maintained at Federal expense. In 1977, the station was renovated by the U.S. Army Corps of Engineers, only to be refurbished in 1980 following a fire that caused extensive damage.

The existing "cottage-style" booth (1951 circa) at Broadway and 43rd Street will be completely demolished and rebuilt with many improvements.

The new U.S. Armed Forces Recruiting Station will feature nine video display screens.

The project is scheduled to be awarded on September 30, and construction is to begin in the first quarter of calendar year 1999. Fabricated structure manufacturing is to begin immediately, according to Bill Tully, Project Manager. The exterior of the new station will blend in with the flashing neon lights and backdrop of Times Square at the crossroads of the world.

Historically, the station's location has played a crucial role in the recruiting effort for the four services that now occupy it. "The Booth, as it is commonly referred to by the recruiters who know it, is the busiest walk-in recruitment office in the country. And it is very successful," said LTC John H. Bullock, Jr., Commander of the U.S. Army Recruiting Battalion, New York. "It plays a very important role in our recruiting mission, which is to provide the strength for America's Army."

The U.S. Army Corps of Engineers, New York District is the design and construction agent for the approximately half-million dollar project. Parsons Brinckerhoff is the design firm for the project.

The Booth will be completely replaced. "The old structure will be removed, and whether or not it's modular construction, the assembly will be done on site." said Tully.

New York District's Real Estate Division will have the task of relocating the recruiters to temporary space for a four-month period while the construction is ongoing.

"The project will be a marked improvement to the recruiters working environment," said Tully. "The new Booth is going to have amenities that it now lacks. It will have functional air conditioning, several electrical outlets for computers and fax machines, and restroom facilities."

The recruiters are presently working out of 1950s furniture which makes the space even smaller to operate from. New systems furniture will take advantage of every square foot in the new booth and will have functional storage space. Recruiters will no longer work from four corners of the 35 x 18-foot booth, or share common areas — they will be separated in their individual sections that will make it more hospitable for the recruiters and military prospects as well.

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For the soldiers: Corps of Engineers is changing the face of West Fort Hood

by Anita Horky

If you haven't been to West Fort Hood lately, you won't recognize it.

Thanks to the U.S. Army Corps of Engineers' Central Texas Area Office, the western portion of the world's largest military installation is getting a facelift. Construction crews are pouring foundations for 140 new houses, erecting walls for a vehicle maintenance shop, and completing the first phase of a $50-million barracks complex.

More than 400 soldiers will soon be living in the new $50-million West Fort Hood barracks complex, which includes the barracks (above), a community building, a dining facility, three administrative buildings and a central energy plant. (Photo by Anita Horky)

"Our mission that we share with the Corps of Engineers is to ensure that we provide the best facilities for where our soldiers live, where they recreate and where they work," said COL Richard Craig, the installation's director of Public Works. "We're covering the whole gamut of what a soldier's life is all about at West Fort Hood. It's all being improved, and a great deal of it is with the Corps of Engineers."

The most visible change to West Fort Hood is the huge barracks complex, which replaces several old barracks buildings. The first phase of the complex, which includes rooms for 408 soldiers, a community building, dining facility, three administrative buildings and a central energy plant, will be finished in September. Phase II, which will double the number of soldiers' rooms and provide another community building as well as five more administrative buildings, will be completed in the year 2000.

"It's the most modern set of facilities I believe there are in the United States Army today," Craig said. "As a soldier who's got 30 years in and started out as a private living in the open barracks, it's absolutely amazing to me the progress we've made in providing a real lifestyle for the soldiers living in the barracks."

One such soldier is PVT Joshua Zinn of the 504th Military Intelligence Brigade. He moved from older barracks on West Fort Hood into the new barracks when half of the rooms were opened to soldiers in July. "They're a lot better than the last ones we lived in, a lot better," he said. "We have a lot more privacy."

Before, Zinn shared a bathroom with 27 soldiers and had to walk to the day room to use the microwave. Now he has a private room within a suite with a bathroom and kitchen that he shares with just one other soldier.

Each private room has its own thermostat and walk-in closet, and there are ceiling fans throughout.

"The troops love the rooms, they really do," said Harold Molnes, the Corps' on-site construction representative. "It's a very visible project ➤

and we've had a lot of visitors. The soldiers and commanders are happy."

Why wouldn't they be? No details have been overlooked. The staff duty officer in the centrally-located community building will be able to monitor the smoke alarm system throughout the barracks. A continuous, covered walkway connects the soldiers' rooms with the community building, so soldiers won't have to step into bad weather to go play pool, check their mail, do laundry or just hang out. There's bulk storage for the troops' cumbersome military gear, as well as an attached mud room for the soldiers returning home from duty in the field. No one will even have to fumble for the lights because they're motion-activated. The dining facility next door, complete with aluminum ceiling tiles, skylights and ceiling fans with neon lights, is just as modern. An elaborate sound system can pipe in music or be used for public announcements. The seating area can be partitioned for private parties. The kitchen boasts the post's first pulping machine, which turns waste into compost material. There's also a take-out counter and an outdoor seating area.

Come fall, the now empty tables will be filled with soldiers chowing down, up to 340 at a time, thanks to the facility's design. It's actually two dining facilities in one with two separate serving and eating areas for more efficient use. But for now, construction crews are putting the finishing touches on the dining facility and barracks. Grass is beginning to grow in the green areas around the buildings.

Up to 340 soldiers will be able to eat at one time at the new West Fort Hood dining facility, which has two separate serving and eating areas. (Photo by Anita Horky)

About a mile away, work is progressing on the new $6.5-million vehicle maintenance shop. Many of the same soldiers who will live in the West Fort Hood barracks complex will work at this 27,000-square-feet facility repairing and servicing military vehicles in nine maintenance bays.

And construction has begun on 140 four- and five-bedroom homes in the nearby Montague Village family housing area. Enlisted soldiers and junior NCOs, those who can't typically afford comparable houses off post, will move in this spring.

For the Corps' Central Texas Area Office, all of the new construction means satisfying Fort Hood, its largest customer. For the installation, it's more symbolic. The sign outside the barracks complex identifies the facility and reads: "III Corps and Fort Hood: Keeping our promise to soldiers."

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PWD

The new barracks on West Fort Hood include many amenities such as outdoor picnic areas (above), bulk storage, a mud room and a continuous, covered walkway connecting the soldiers' rooms with the community building. (Photo by Anita Horky)

Anita Horky is a public affairs specialist in the U.S. Army Corps of Engineers, Fort Worth District.

66th MI Group moves to newly renovated facilities in Darmstadt

by Marnah Woken

Members of the 66th Military Intelligence (MI) Group are making preparations for their move this summer from Augsburg to Darmstadt.

As they pack their boxes and bags, the Darmstadt community is gearing up for the 396 soldiers, civilians and their families who will be settling into new homes in the area.

Along with moving into their new homes, members of the 66th MI will also be moving into newly renovated working facilities, located on the former Darmstadt training area.

Europe District began renovating the training area's preexisting buildings in October of last year, in preparation for 66th MI's move this summer. The renovation project consists of six buildings, four of which received most of the interior renovations.

"The buildings were in good shape so there wasn't a lot of exterior architectural or structural redesign," said Don McClure, Europe District Project Engineer. "The architectural design that was needed was a joint effort between the 104th Area Support Group (ASG) Directorate of Public Works (DPW), the Corps, 66th MI, 66th MI's parent unit INSCOM, and the contractor. We all worked together to create a design and construct package."

Along with interior renovations to the existing structures, the primary portion of the renovation work was in the electrical and mechanical requirements, according to McClure.

"The 66th MI has special requirements and needs based on the type of work they do," he said. "For example, the specialized intelligence equipment they use has to be maintained at a certain temperature which required the installation of air-conditioning units. These special needs made this a more technical project."

Because the mechanical and electrical needs were a large part of the renovation, Mechanical Engineer Larry Lucken and Electrical Engineer Peter Oster from Europe District played a big part in the project along with Gary Schilling and Bob Posey from INSCOM.

"Larry and Peter were involved in the design review process from the beginning and coordinated with the contractor on the reviews. Because they were so involved and communication was so important, they stayed on-site through the entire project."

McClure added the biggest challenge on the project was the coordination between the different agencies. "From the start, we had weekly meetings with the 66th MI and with their parent unit, INSCOM, along with the BSB and the ASG. Getting through the design and keeping it moving forward was a challenge."

Marie Powell, 66th MI Transition Cell Chief agreed that communication and coordination were essential to the success of the project.

"We had to do a lot of planning and coordinating before the renovation to make sure our special requirements were met," Powell said. "Because 66th MI sends and receives classified information, we needed a special facility to meet our unique requirements."

"This has really been a great, cooperative effort," added Powell. "There have been a lot of people working on this project, several contractors, engineers, the BSB, the ASG, ➤

The 66th Military Intelligence Group moves to their new facilities in Darmstadt this summer. Preexisting buildings from the former Darmstadt training area were renovated to provide space for the 396 military members moving to the area. (Photo by Marnah Woken)

USAREUR, and the 66th. It was vital that we all maintained constant communication and everyone did a really good job of that."

Charles Hayward, Chief of Staff for the 66th MI oversaw the entire renovation project.

"We're very happy with the work that was done on the facilities— they will certainly meet our requirements," said Hayward. "We've worked very closely with the Corps for the past year and really appreciate the outstanding support from Dave Nichols, Don McClure and Nick Diamond."

Hayward added members of the 66th MI should be completely moved into their new facilities by mid-September.

(From left to right) Project Manager Nick Diamand, Facility Support Section Chief Ken Wunsche, Project Engineer Don McClure and Mechanical Engineer Larry Lucken inspect one of the 66th Mi's emergency generators. (Photo by Marnah Woken)

Bruce Riesterer of the 66th MI is one of the first to move to the new location. "I think the new facilities are going to be great," he said. "It's a busy time for our unit, but once we get settled in I think we're really going to like it here."

"There are more units to interact with in Darmstadt than Augsburg," added Riesterer. "That will give a lot of the soldiers, especially the new soldiers, a chance to work with different organizations and see how other units operate."

The major portion of the renovation work on the project was completed in mid-May. Interior renovations to the two main buildings included the addition of suspended ceilings, fresh paint, new carpeting, the installation of additional electrical outlets, and the replacement of some interior doors. A site improvements contract is also scheduled to be awarded in September which will improve the area's parking lots, outside fencing, and access road.

Other Europe District employees who worked on the project include Resident Engineer Dave Nichols, and Project Managers Nick Diamand, Alan Williams, Al Opstahl, Rheinhart Streit and Dina Ginn. PWD

Marnah Woken works for the Europe District Public Affairs Office.

Humanitarian aid to Africa

by Marnah Woken

The U.S. European Command (USEUCOM) and the U.S. Embassy in Mauritania, Africa recently asked the Corps of Engineers to provide a public health engineering assessment of Nouakchott, Mauritania, a severely impoverished African city.

The city's annual August to September rainy season floods the El Mina Quarter of Nouakchott, causing standing water to mix with raw sewage. This standing water contaminates the limited drinking water in the area, resulting in cholera and malaria outbreaks.

These problems have also magnified due to the area's rapid over population and geographical conditions.

Europe District Environmental Engineers Peter Russin and Pat Brady went to Nouakchott to assess and evaluate the situation and to propose corrective measures to combat the threat to public health in the El Mina Quarter. They conducted a two-week study and site-analysis, identifying three major life and safety health problems in the area.

"Basically, EUCOM requested a team to go down there to try to come up with a solution to improve

the quality of living," said Russin. "This was done as part of Europe District's Outreach Program.

"This is a highly populated area. People are migrating from the desert to the city, looking for work. The population is at the point where the quality of living is starting to deteriorate as these people adjust to living in an urban area."

The main problems found in the assessment include a lack of clean drinking water, poor sewage handling and the disposal of domestic and solid waste products.

"Uncontrolled solid waste refuse litters virtually the entire El Mina Quarter," said Brady. "There is a visible lack of garbage cans, dumpsters, and other means of controlling and transporting the waste to an intermediary pick up point, so the waste piles lie in the open, year round."

The area also suffers from a total lack of natural drainage, according to Russin. This, combined with the accumulation and pooling of used water, spent kitchen water and sewage, creates a serious public health condition.

"There is a serious drainage issue in the area," said Russin. "However, the magnitude of trying to resolve the drainage issue is a big project. All you can really do at this point is try to control and handle the solid and domestic waste that mingles with the drinking water. In a sense, there's nothing that can be done about the drainage problem unless you spend millions of dollars. We concluded that if we could control the existing solid and domestic waste lying on the ground, it would help a great deal."

Chief of Engineers, Lt. Gen. Joe Ballard presents coins to Europe District Environmental Engineers Peter Russin (pictured left) and Pat Brady. (Photo by Europe District).

"If we can get rid of the existing waste, the heavy rainfall won't cause as many sanitation problems," he added. "Obviously, there will be some ponding, but it won't be in proximity of the solid waste."

Nouakchott's existing water supply, storage, and transmission systems are also seriously inadequate. In addition, further water production is expected to decrease in the future, meeting only 70 percent of the city's demand.

"The water lines aren't buried deeply enough and in some cases lack acceptable backfill material," said Brady. "Frequent failure of lines and joints, coupled with low operating hydrostatic pressure have severely compromised the water quality in the lines."

"In effect, the water lines themselves provide an excellent conduit for waterborne diseases," he added. "In addition, open well dispensing points are vulnerable to direct human and animal contamination and provide an excellent breeding ground for mosquitoes during both the dry and rainy seasons."

In their final assessment, Brady and Russin offered suggestions on how to solve the problems that pose an extreme health hazard to the community.

"We looked at it from a realistic point of view and said, 'What can we do to improve the quality of living for this community with the dollars that we have.'"

"Basically, we provided an outline in terms of doing an initial cleanup of the area, and disinfection of the solid waste areas," said Russin. "Currently, there's a procurement going through the State Department for the cleanup, and the implementation of a solid waste management plan that will control, handle and dispose of the solid waste."

Both Russin and Brady feel this assessment and the subsequent cleanup efforts may serve as a pilot program for other impoverished African cities.

"This is something that can be duplicated in other impoverished communities," said Russin. "I think once everyone begins to see the results of these efforts, it will be replicated in other areas, ultimately helping the people who live in these impoverished areas."

Russin added the people living in these areas are eager for assistance "an eagerness which shows in their facial expressions. "The people there are impoverished but you really don't see it in their faces," said Russin. "I think they know that you're there to help and they get their hopes up. They're very friendly, very interested in newcomers, and very interested in what's going on."

"They were extremely thankful for the smallest things including the candy we gave them," added Russin. "It really shows that they don't need a lot of material goods to be happy because they have so little, it shows they can be happy anywhere." PWD

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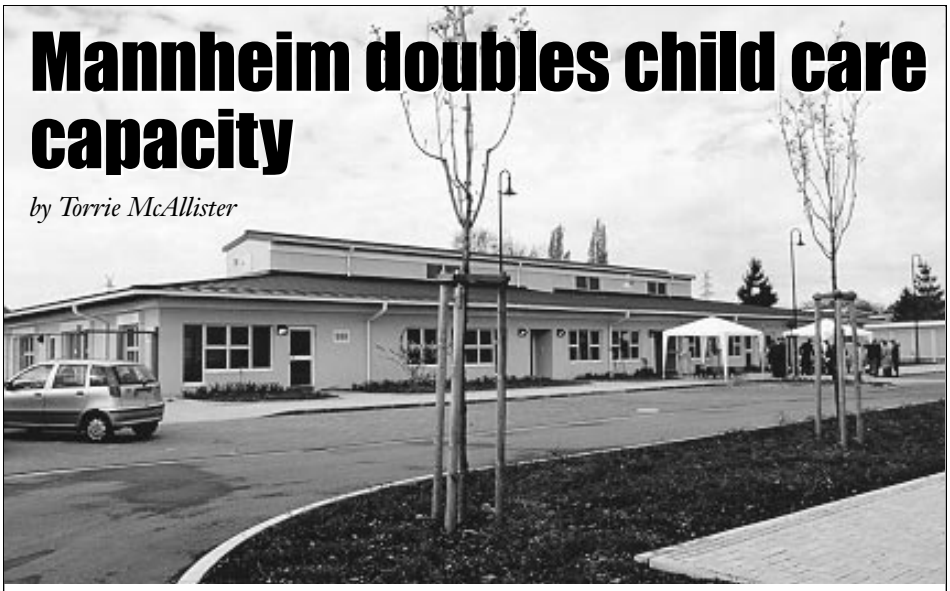
Mannheim doubles child care capacity

by Torrie McAllister



The roof top on the new Mannheim Child Development Center hides mechanical systems which can be easily maintained without disrupting operations. (Photo by Torrie McAllister)

Mannheim's child care capacity doubled in size in April with the opening of the community's new child development center (CDC).

The center is one of the largest in U.S. Army, Europe with room for 303 children.

"With all the construction underway in Mannheim, it is significant that the first to be completed is the new Child Development Center," said BG Robert L. Nabors, Mannheim-Worms Senior Tactical Commander. "When our community began rebuilding after drawdown, we put our priority on our children."

In fact, Mannheim has had its eye on a new center since 1983, said Larry Scavone, 293rd Base Support Battalion Deputy Director for Public Works. Scavone was chief of the Installations Branch and Hugh Exton (now U.S. Army, Europe's Assistant Deputy Chief of Staff, Public Works) was the Mannheim Community Facilities Engineer. Together, they first put the center on the master plan. While they both changed jobs several times, their plans for a new CDC lived on. It was almost built in the late 1980s but fell victim to the construction moratorium during drawdown. German Payment-in-Kind funds were used to revive the project when it became clear Mannheim would remain an enduring community.

"Our original DD Form 1391 requirement was for 303 children. Even the building site is the same," Scavone said. "It's next to the elementary school and in the middle of the housing area. Parents can walk with the kids. The master plan made sense, so commanders weren't tempted to change it. I think consistency helped make the project credible. The moral of the story is good things come to those who wait."

While the requirement is old, the $5.2 million facility is state-of-the-art. The site is over 11,325 square meters including the building, playgrounds, parking and access roads.

The building offers children a safe, stimulating environment with music and art rooms, water and sand tables, and extensive playgrounds. Children can move freely between modular activity stations while staff members stay in place and supervise. The mechanical systems were carefully designed into a second story roof cupola where all the heating, ventilation, electrical and air conditioning systems are readily accessible for maintenance without disturbing child care operations.

"Having raised three boys and having lived in Mannheim three times, this is a glorious day," said Mrs. Robert L. Nabors, Senior Tactical Commander's wife. "Children are happy when they are learning, and happy parents are parents who aren't worried about their children's safety while they are away."

The Corps of Engineers Project Engineer Hans Deberle and Project Manager Dana Luedtke worked with Staatliches Hochbauamt Heidelberg and Herr Steiner of the 293rd BSB Directorate of Public Works worked with CDC Director Jeannie Williams and Patricia Johnson from the Deputy Chief of Staff Personnel's office to bring the facility to fruition. Construction was done by joint venture firms: Stahlbau Schaefer, Ludwigshaven and D&B-Bau Neustadt, a.d. Weinstrasse. PWD

Torrie McAllister is the public affairs officer for Europe District.

293rd BSB Deputy Director of Public Works Larry Scavone (center) enjoys opening the CDC he first put on the Mannheim master plan with Hugh Exton in 1983. (Photo by Torrie McAllister)

Master Planning Applied Skills Course conducted 24-28 August 1998 at Taegu, Korea. This class is the first training for planners in Korea on the use of the Army's family of automated planning systems. The course content includes the Executive Information System, Army Stationing and Installation Plan, Army Criteria Tracking System, Facilities Planning System, and the Real Property Planning and Analysis System. Despite floods in the North, which kept some Area I planners away, heightened security due to terrorism threats, demonstrations outside the walls and sometimes strained communications links, the class was a great success and a major step in improving planning in Korea.

Real Property Applied Skills Course at Rock Island Arsenal in April 1998. This class provided AMC and other Real Property professionals with an opportunity to hone their skills in the use of real property automation. Curriculum included students working with their own data to improve reporting quality.

Fort Greely DPW, USACPW and Alyeska join forces to protect national assets

by Thomas W. Spoerner

The Trans Alaska Pipeline, the wilderness areas that the pipeline crosses, and the Black Rapids Training Site are all assets that contribute to our national well-being. Black Rapids is a remote training site located on the Delta River some thirty miles south of Fort Greely, Alaska. The site provides a unique training environment for cold weather training. The Trans Alaska Pipeline System (TAPS) is the conduit that carries petroleum from the North Slope of Alaska, often across remote, pristine wilderness areas, to the port of Valdez.

Preventing leaks in the TAPS and release of petroleum into the environment is very serious business. The Alyeska Oil Services Company has a corrosion protection system in place to prevent corrosion leaks and subsequent releases. However, some of the components of the corrosion protection system are getting old and are at risk of failure. In response to this risk, Alyeska is upgrading the corrosion protection system by installing a string of impressed current cathodic protection systems along the length of the TAPS.

This is a formidable task which involves constructing facilities for providing access, supplying power, and continuously monitoring the cathodic protection system in some very remote locations.

The Fort Greely DPW has contributed to the protection of the TAPS by arranging to sell power and providing an accessible location for a cathodic protection system that protects a forty mile length of the TAPS. However, when the TAPS cathodic protection system was installed and turned-on, the Fort Greely DPW Engineers found that the new system was causing problems for their underground structures.

Testing of the cathodic protection system and underground structures at the Black Rapids Site showed the DPW staff that a condition called "interference" was rapidly deteriorating their underground structures.

Interference causes accelerated attack of metallic structures and threatens the integrity of a drinking water tank and well, a fuel tank, an electrical grounding system, and several piping systems.

On top of this bad news, the DPW Engineers were presented with another dilemma. On one hand, Alyeska engineers suggested that electrically connecting the underground structures at the Black Rapids Site to the TAPS would solve the interference problem. But an independent consulting firm suggested that connecting the Black Rapids structures to the TAPS would actually put the cathodic protection system for the structures at Black Rapids Site at risk. If operation of the TAPS cathodic protection system was ever interrupted, the cathodic protection system at the Black Rapids Site could be quickly consumed by interacting with the TAPS.

To avoid this problem, the consulting firm recommended that the Black Rapids structures not be connected to the TAPS. Furthermore, the consulting firm recommended that the interference problem should be solved by designing and installing an elaborate (and expensive) system of sacrificial anodes at the Black Rapids Site.

The DPW Engineers solved this dilemma by turning to the U.S. Army Center for Public Works (CPW) for answers. CPW's Sanitary and Chemical Division handles corrosion control and cathodic protection programs and contracts for the Army. The resident, NACE certified, Cathodic Protection Specialist reviewed the data and the facilities, verified that the Black Rapids Site could be at risk and proposed an easy and cheap fix to the dilemma. The whole problem could be fixed by simply inserting the appropriate diode in the electrical connection proposed by the Alyeska engineers.

A design was produced to implement the proposed fix. After the Sanitary and Chemical Division and the Electrical Division of CPW reviewed the design, it was presented to the Joint Pipeline Office that regulates the TAPS.

The fix was blessed and implemented. The environment is protected from oil leaks and the underground structures at the Black Rapids Site are protected from corrosion— at practically no cost to the Fort Greely DPW.

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Thomas W. Spoerner works in the Sanitary and Chemical Division of CPW's Engineering Directorate.

Investment fund fosters installation P2 programs

by Jack Shipley

With the idea that you have to spend money to save money, an Army initiative is making dollars available to installations to pay for pollution prevention programs.

The Pollution Prevention Investment Fund, directed by LTC John Ruehe of the Army's Directorate of Environmental Programs (ODEP) and administered by the U.S. Army Environmental Center (USAEC), is designed to finance money-saving projects that otherwise might not get funding through traditional channels. It also reduces environmental compliance costs, reduces hazardous waste generation and gives installations incentives to use technology and innovation.

"We hope the end result will lead to technologies that have the potential for use Armywide," said Bill Nelson, USAEC's manager of the program. "The goal is to show that pollution prevention projects have earned their stars, so procurement personnel can begin to implement them throughout the Army. By way of performance reports, we can show which projects really do save money."

ODEP introduced the fund in January 1997 by issuing a memo requesting projects from Army major commands and installations. In its first year, the initiative provided $325,000 to fund eight projects at seven installations.

Nelson prioritized the projects based on ODEP's guidance, dollar amount and economic payback. Success came quickly, according to Nelson, and some projects had a much quicker return on investment than anticipated.

One such project is the paint bulking and can crushing operation at Fort Hood, Texas. It came about as a remedy for the excess paint from vehicle and facility painting projects. The Environmental Management Branch at Fort Hood used its funds to purchase two commercial can crushers to turn the metal paint cans into a recyclable product and extract the paint for storage in a drum. This has eliminated the need to dispose of paint-laden cans as well as the need for Department of Transportation storage boxes, saving $54,000 in five months. The only resultant hazardous waste is any remaining oil-based paint.

"When we planned this project seven months ago, we had an annual cost-avoidance projection of $100,000. We will realize that goal within the first year," said Randy Doyle, environmental protection specialist at Fort Hood.

The investment-fund team expects the number of projects to double in fiscal 1998, with the total fund reaching $500,000. With continued growth already planned, $10 million per year is programmed for fiscal years 1999 to 2005. The monies will be available to all Army components, including National Guard and Army Reserves. ODEP and USAEC will continue to encourage project requests from the field, while checking the annual Environmental Program Requirements reporting module for potential candidates.

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Jack Shipley is a public affairs specialist at USAEC Public Affairs.

Fort Irwin finds innovative use for affected soil

by Anthony Napolitano

A line of dump trucks rumbles down the desert road toward an unpaved parking lot that symbolizes Fort Irwin's commitment to balancing environmental concerns with training. Fort Irwin is achieving this balance in a way that preserves shrinking resources.

Fort Irwin, California, home to the National Training Center, is using soil containing petroleum, oils or lubricants (POLs) from training missions to pave certain areas of the installation that would normally call for asphalt or concrete. This innovative recycling technique, developed by a local contractor, supports the installation's mission and training while saving money that would be spent on contaminant disposal and construction materials.

The environmental implications of this new type of pavement are substantial, according to Dennis Fleener of Fort Irwin's recycling program. The contaminated soil, originally considered a hazardous waste, is processed by the contractor and put down like traditional pavement. This new pavement, however, passed the California Environmental Protection Agency's leaching tests by releasing no hazardous materials during natural exposure, Fleener said.

For 12 years, Fort Irwin stockpiled its POL-contaminated soils at a site near the NTC staging area, but in 1993 the California EPA told the installation it must dispose of the soil as hazardous waste. The post's first option was to start incinerating the soil at a cost of 16 cents per pound, plus transportation costs. Instead, the installation completed a road-building test project with the new pavement in 1994 and found a way to recycle the contaminated soil while saving money and protecting the environment.

The recycled-POL pavement also helps the installation control dust, one of its major environmental concerns. Paving heavily traveled areas will gradually reduce the large quantity of dust caused by vehicle traffic. Until now, traditional paving was limited by costs associated with the size of the maneuver staging area and the heavy vehicle traffic it receives. The new pavement is cheaper to install and maintain, Fleener said.

"We saved over $45 per yard in installation costs on our first project," he said. "The whole project generated more than $1 million in savings."

The new pavement will also reduce maintenance costs in heavily traveled areas because it is three times stronger than traditional paving materials such as concrete, according to strength tests performed on Fort Irwin.

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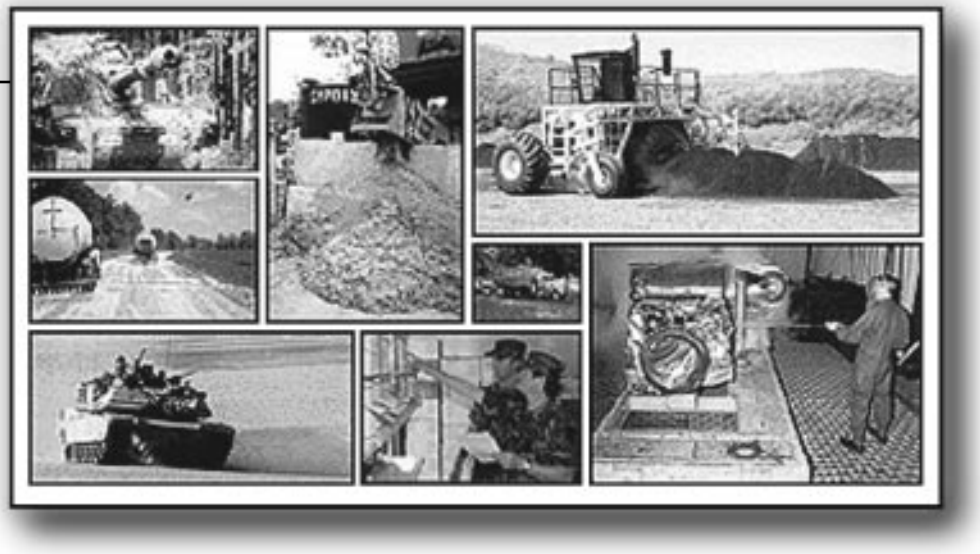
Anthony Napolitano is a public affairs specialist at USAEC Public Affairs.

Army "Buys Green" to reduce waste

by Jack Shipley



A key element in properly managing our natural environment and our quality of life is pollution prevention. Gone are the days when we can simply build larger treatment plants and landfills.

Much of the trash we discard is actually valuable and economically recoverable. The Army is making substantial efforts to take advantage of this, both by collecting recyclable materials for sale and by purchasing products made from these materials. The purchase of recycled-content products by federal agencies is referred to as "affirmative procurement."

The Army is committed to spreading the word about its affirmative procurement program through grassroots education. Its "Buying Green" program promotes the purchase of products made with recycled and recovered materials that will not harm the environment. In many cases, it also requires less energy to produce items from recycled and recovered materials.

Affirmative procurement has its beginnings in the 1976 Resource Conservation and Recovery Act, which requires all federal agencies to give preference in purchasing to products and practices that conserve and protect natural resources and the environment.

Education is key to the success of the program, according to Bob Schroeder, the program manager for affirmative procurement in the Army's Directorate of Environmental Programs. His approach is one of grassroots communication— reach as many people as possible through various media and effect change from "the bottom up."

The "top side" of the chain of command did its part when President Clinton signed Executive Order 12873, "Federal Acquisition, Recycling, and Waste Prevention," on October 20, 1993. It directs federal agencies to purchase recycled and environmentally preferable products. The executive order is also codified in the Federal Acquisition Regulation.

According to Curtis Stevenson in the Office of the Assistant Secretary of the Army for Research, Development and Acquisition (SARDA), three Army major commands have expressed a need for Army affirmative procurement guidance in the field. He is working on a Best Practice Guide and new section in the SARDA Web site that will help requirements and procurement personnel share the responsibility. The U.S. Army Environmental Center's affirmative procurement Web site will tie in with SARDA's, completing the link from field agency to the secretariat level of the Army.

There are 36 products in the EPA's Comprehensive Procurement Guideline as of November 1997. The EPA guideline's Recovered Materials Advisory Notices contain recommended minimum content standards for recovered material, as well as recommendations for specifications and purchase methods.

Once the EPA designates a procurement item or product category, procuring agencies are required to comply within one year by purchasing the item with the highest recovered- materials content level practicable.

"We hope people will see how easy it is to buy these products. For example, there is no reason why requirement generators can't specify refined motor oil. It's cheaper [than new oil] and it meets the mil specs and the warranty requirements of all major automobile manufacturers," Schroeder said.

The DoD policy on procurement of EPA designated items, dated July 1995, states that 100 percent of such purchases will meet or exceed the guideline standards unless written justification is made.

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Comprehensive Procurement Guideline Items

Paper & Paper Products
Non-Paper Products
Office recycling containers
Office waste receptacles
Plastic desktop accessories
Toner cartridges
Binders
Plastic trash bags
Printer ribbons
Plastic envelopes

Transportation
Traffic barricades
Channelizers
Parking stops
Traffic cones
Delineators
Flexible delineators

Vehicular
Re-refined lube oil
Reclaimed engine coolants
Retread tires

Parks & Recreation
Playground surfaces
Running tracks

Landscaping
Patio blocks
Fencing
Garden and soaker hoses
Lawn and garden edging
Hydraulic mulch products
Compost made from yard trimmings

Construction
Laminated paperboard products
Cement and concrete containing fly ash
Cement and concrete containing ground-granulated blast furnace slag (GGBF)
Shower and restroom dividers
Building insulation products
Structural fiberboard
Carpet
Latex paints
Floor tiles
Pallets

(As of November 1997) PWD

Business rule repository available on web

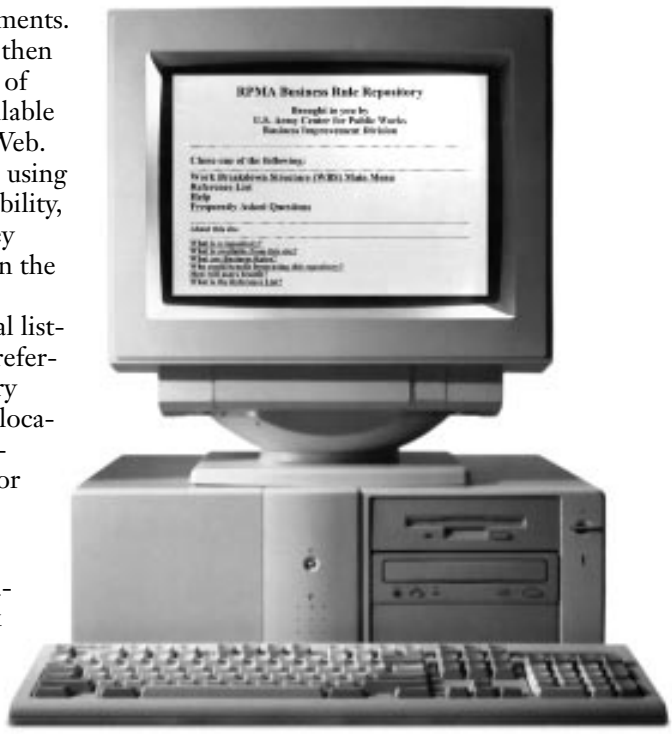
The Business Improvement Division of the U.S. Army Center for Public Works has developed a repository of Real Property Maintenance Activity (RPMA) business rules and associated documentation. The rules are organized by a Work Breakdown Structure (WBS), which allows you to summarize at different levels. The WBS groups the rules into major categories such as 01 Real Property Acquisition and Disposal, 02 Real Property Accountability, 03 Contracting, etc. Each of these major groupings is further divided into sub groups, and identified by additional digits added onto the WBS number such as 01.01.02.

This repository is located on the USACPW web site (http://www.usacpw.belvoir.army.mil) and can be accessed by selecting Information, then the letter B and Business Rule Repository. The URL to directly access the repository is http://www.usacpw.belvoir.army.mil/programs/rules/wbsmain.htm.

Once in the repository, you may search using several methods:

- Select the major WBS level to display a detailed listing of the WBS for that functional area. Each of these items is linked to its description and a listing of the related governing documents. This document list is then linked to the location of that document, if available on the World Wide Web.
- Search for key words, using the web browser capability, to find rules where key words are contained in the description.
- Check the alphabetical listing of all documents referenced in the repository with links to the web locations to locate a document when the Title or document number is known.

For more information, please contact Dick Farner, CECPW-FB, (703) 428-9389 DSN 328, FAX: (703) 428-7918, e-mail:dick.l.farner@cpw01.usace.army.mil. PWD



(continued from previous page)

The 36 products run the gamut from office and maintenance supplies to vehicle fluids and construction materials.

"Our plan is to enhance the market for these materials and, in the process, divert a valuable resource from the waste stream. At some point the affirmative procurement process will become transparent to the user," Schroeder said.

Program Manager Doenee Moscato of the U.S. Army Environmental Center (USAEC) heads the awareness effort. The marketing strategy includes speaking at a variety of conferences and training workshops.

"Through this we reach a wide audience of buyers, vendors and manufacturers, and trainers," Moscato said.

The affirmative procurement section of the USAEC Web site is structured to tie together all facets of the affirmative procurement program: ordering and purchasing information, vendor and manufacturer sources, the latest information on EPA designated items and related Web links.

An affirmative procurement guide is in production, and plans are under way to create an educational video spot to reach a wide audience through Soldiers Radio and TV.

"Since DoD's regions closely match those of the EPA, the program can benefit from a regional approach," Moscato said. Army officials say affirmative procurement makes good economic sense. Purchasing products made from recovered materials conserves natural resources by maximizing recycling and preventing waste. This process also creates a healthier and safer workplace. At the same time, these products can spur private sector development and enhance the local and national economy.

For more information on the Army's affirmative procurement program, call the Army Environmental Hotline at 1-800-USA-3845, visit the USAEC Web site at http://aec-www.apgea.army.mil:8080/ or send e-mail to t2hotline@aec.apgea.army.mil. PWD

O&M videotapes library

by Myron Kellberg

The Mechanical & Energy Division of CPW's Engineering Directorate has numerous videotapes available for loan to installations. The subject matter of the tapes includes a broad array from energy conservation to O&M issues.

To request a tape loan, please contact Richelle Harris at (703) 806-6075 DSN 656, FAX: (703) 806-5220, e-mail: richelle.d.harris@cpw01.usace.army.mil, or Myron Kellberg, (703) 806-6072, e-mail address: myron.h.kellberg@cpw01.usace.army.mil. Provide the name, mailing address, phone and fax number of the person requesting the loan and an alternate point of contact. Most tapes may be borrowed for four weeks, although time extensions will be considered.

Video tapes are provided for informational purposes only. Reference to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency, contractor, or subcontractor thereof. All tapes are protected under copyright laws and may not be copied or used for commercial purposes. PWD

Myron Kellberg is a mechanical engineer with the Mechanical & Energy Division of the Engineering Directorate in CPW.

NAME OF VIDEO	PLAYING TIME
Boiler Operation Waterside	20 Minutes
Boiler Operation Fireside	15 Minutes
Coupling Alignment	23 Minutes
Joining Plastic Pipes	19 Minutes
Centrifugal Pump Maintenance	23 Minutes
Pipe Welding Qualifying	26 Minutes
A Better View: Energy Efficiency Windows for Navy Housing	18 Minutes
Winners: Leaders on the Energy Front	34 Minutes
Executive Order 12902	124 Minutes
Energy Efficiency In Federal Buildings	
TeleFEMP Broadcast III:	
"Saving Billions through Federal Energy Mgmt"	139 Minutes
Least-Cost Energy Decisions for Buildings:	
Introduction to Life Cycle Costing, Part I	60 Minutes
Uncertainty & Risk, Part II	36 Minutes
Choosing Economic Evaluation Methods, Part III	35 Minutes
Power Planner 2001 (II), C.E.M. Industries, July 12, 1994	10 Minutes
Air Conditioning Service One	Unlisted
Air Conditioning Service Two	Unlisted
Residential Gas Furnace Theory & Maintenance	Unlisted
Steam Trap Theory and Repair	40 Minutes
Refrigeration Theory	45 Minutes
Boiler Theory & Controls	60 minutes
Robotic Underground Storage Tank Insp/assessment	30 Minutes
Energy Savings Performance Contracting	8 Minutes
Energy Savings Performance Contracting (ESPC):	
Legislation & Contracting	12 Minutes
Underground Heat Distribution Systems	
(A.Q.C. Inspector's viewpoint)	28 Minutes
Integrated Plant Package:	
Demo of Computerized Piping System Analysis	23 Minutes

New web page for Fire & Emergency Services

Check it out! Find out what's new in the world of Army Fire & Emergency Services by checking out the new World Wide Web Site: http://www.cecer.army.mil/armyfire/home.htm

Bruce Park, Director of Fire & Emergency Services, OACSIM, keeps the "hottest" news and announcements posted and offers links to:

(1) Latest emergency medical services developments.
(2) Fire prevention and education programs.
(3) New fire fighter training system status.
(4) HAZMAT sources.
(5) Updates on the Fire Information Resource Management System (FIRMS) for fire department operations.
(6) Center for Public Works and MACOM fire contacts.
(7) Latest (10 September 1997) revision of AR 420-90, Fire & Emergency Services.

POC is Bruce Park, OACSIM, (703) 428-6174 DSN 328, e-mail: ParkBA@hqda.army.mil PWD

Readership Survey for *Public Works Digest*

1. Do you work at:
   ☐ MACOM ☐ an installation DPW
   ☐ Other HQDA ☐ ACSIM
   ☐ Corps Division ☐ Corps District
   ☐ Other → Where? ☐ Corps headquarters
   _____

2. What is your position/job title?
   _____

3. Are you on the *Digest* mailing list? ☐ Yes ☐ No

4. If not, how do you receive the *Digest*?

5. Do you receive and read the *Digest* regularly?

6. Do you read: ☐ Every article. ☐ Most articles.
   ☐ Only articles relating to specific topics. → What topics?
   _____
   _____

7. Do you have access to the World Wide Web? ☐ Yes ☐ No

8. Would you read this publication from the Web?
   ☐ Yes ☐ No

9. How helpful is it for you to have the *Digest* available as a downloadable file on our homepage?

Very useful				Not useful
1	2	3	4	5

10. If you have accessed the *Digest* from the Web, have you experienced any difficulties? ☐ No ☐ Yes—please describe:
    _____
    _____

11. Overall, how useful is the *Digest* to you?

Very useful				Not useful
1	2	3	4	5

12. How would you rate the quality of articles?

High				Low
1	2	3	4	5

13. How important are stories on each of the following subjects? Would you like to see more or fewer of each type?

a. Installation Management

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

b. Corps Support

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

c. Facilities Engineering

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

d. Environment

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

e. Energy

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

FOLD HERE

f. Professional Development and Training

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

g. Automation

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

j. New technologies

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

k. Installation good ideas/lessons learned

Important				Unimportant
1	2	3	4	5
More				Fewer
1	2	3	4	5

FOLD HERE

14. What topics would you like to see addressed in the *Digest*?
    _____
    _____

15. Do you have other suggestions or comments?
    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____

Thank you for your assistance!

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Public Works Digest

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◇ ◇ ◇

Fort Hood's new barracks complex

◇ ◇ ◇

Design challenges at West Point

◇ ◇ ◇

Devens RFTA helps veterans rebuild lives

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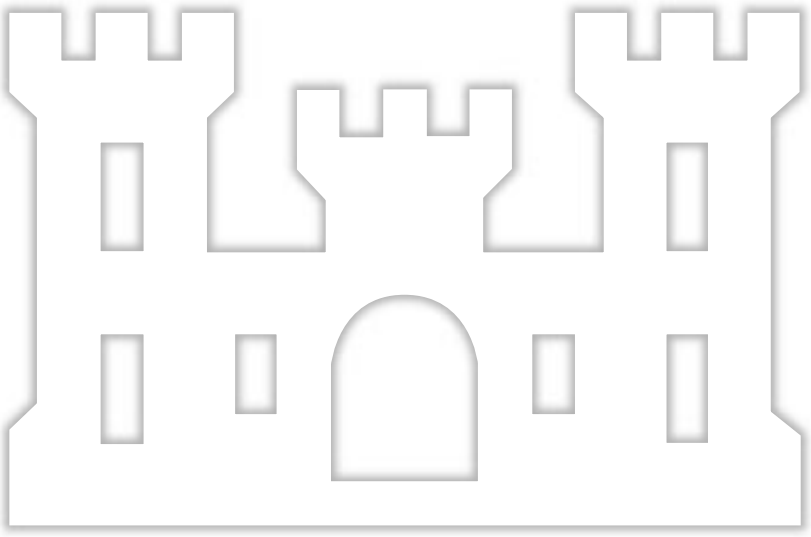

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